Amendments to the Claims:

This Listing of Claims should replace all prior versions and listings of claims in this application.

Listing of Claims:

Claim 1 (Currently Amended): A method for detecting the presence or absence of a bacterium in a sample selected from a wound, a body fluid or fluid from a wound, said method comprising the steps of:

a) contacting a said sample with a detectably labeled synthetic ~~serpin~~ α1-proteinase inhibitor reactive site loop domain peptide substrate under conditions that result in ~~modification~~ cleavage of said substrate by an enzyme produced in said sample by a bacterium; and

b) detecting a ~~modification~~ cleavage or an absence of the ~~modification~~ cleavage of the substrate, the ~~modification~~ cleavage of the substrate indicating the presence of the bacterium in the sample and absence of the ~~modification~~ cleavage of the substrate indicating absence of the bacterium in the sample.

Claim 2 (Original): A method according to Claim 1, wherein the bacterium is a wound-specific bacterium selected from the group consisting of *Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus pyogenes, Pseudomonas aeruginosa, Enterococcus faecalis, Serratia marcescens, Proteus mirabilis, Enterobacter clocae, Acetinobacter anitratus, Klebsiella pneumonia,* and *Escherichia coli.*

Claim 3 (Currently Amended): A method according to Claims 1, wherein the enzyme is a protease.

Claim 4 (Previously Presented): A method according to Claim 1, wherein the substrate is labeled with a fluorescent probe and a quencher dye molecule.

Claim 5 (Previously Presented): A method according to Claim 1, wherein the substrate is labeled by a label selected from the group consisting of spin labels, antigen tags, epitope tags, haptens, enzyme labels, prosthetic groups, fluorescent materials, pH-sensitive materials, chemiluminescent materials, colorimetric components, bioluminescent materials, and radioactive materials.

Claim 6 (Previously Presented): A method according to Claim 5, wherein the substrate comprises at least one of the peptides selected from the group consisting of EAAGAMFLEAIPK (SEQ ID NO: 1), EGAMFLEAIPMSIPK (SEQ ID NO: 2), KGTEAAGAMFLEAIPMSIPPEVK (SEQ ID NO: 3), GAMFLEAIPMSIPPE (SEQ ID NO: 4), and CGAMFLEAIPMSIPAAAHHHHH (SEQ ID NO: 5).

Claim 7 (Currently Amended): A method according to Claim 1, wherein the sample is selected from the group consisting of a wound surface on a subject and a ~~body~~ fluid from a wound on a subject.

Claim 8 (Previously Presented): A method according to Claim 1, wherein the substrate is on a solid support.

Claim 9. (Previously Presented): A method according to Claim 8, wherein the solid support is selected from the group consisting of a wound dressing, a container for holding body fluids, a disk, a scope, a filter, a lens, a foam, a cloth, a paper, a suture, a dipstick, a swab, a urine collection bag, a blood collection bag, a plasma collection bag, a test tube, a catheter, and a well of a microplate.

Claim 10 (Previously Presented): A method according to Claim 8, wherein the solid support comprises a material required to be free of microbial contaminants.

Claim 11 (Previously Presented): A method according to Claim 1, wherein the substrate comprises at least two dissimilar colorimetric components and the substrate is attached to a solid support, wherein modification of the substrate comprises cleaving at least a portion of the substrate that includes one of the colorimetric components, the cleaving resulting in a visible color change.

Claim 12 (Previously Presented): A method according to Claim 11, wherein the colorimetric components are covalently attached to the peptide.

Claims 13-22 (Canceled).